

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended)

A method for producing cell lines or individual organs, differentiable donor cells (6) being supplied to a nonhuman morula (7) or nonhuman blastocyst (1), which are cultivated under conditions that ensure a further development of the morula (7) or blastocyst (1) in stages in which newly formed cell lines having a higher degree of differentiation occur, and comprising the isolation of the cell lines or further differentiation of the cell lines into organs through transfer of the blastocyst (1) into a surrogate mother animal,

~~characterized in that~~ wherein the cells (2) of the morula (7) or the internal cell mass (4) of the blastocyst (1) have a restricted survivability in comparison to the particular wild type or their survivability is reduced through suitable cultivation conditions, and the donor cells (6) supplied to the morula (7) or blastocyst (1) have varying degrees of differentiation and are of non-embryonic origin.

2. (currently amended)

The method according to Claim 1,

~~characterized in that~~ wherein the donor cells (6) contain naturally occurring stem cells.

3. (currently amended)

The method according to Claim 1 ~~or 2~~,

~~characterized in that~~ wherein the cells (2) of the morula

(7) or the internal cell mass (4) of the blastocyst (1) are prepared in a culture dish (8, 9, 10) or are used to prepare a soluble matrix fraction.

4. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 3,~~
~~characterized in that wherein~~ the donor cells (6) are
obtained from umbilical cord blood.

5. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 3,~~
~~characterized in that wherein~~ the donor cells (6) are
obtained from placenta.

6. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 3,~~
~~characterized in that wherein~~ the donor cells (6) are
obtained from bone marrow.

7. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 3,~~
~~characterized in that wherein~~ the donor cells (6) are
obtained from fatty tissue.

8. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 7,~~
~~characterized in that wherein~~ the cells (2) of the morula
(7) or the internal cell mass (4) of the blastocyst (1) are
tetraploid cells.

9. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 7,~~

~~characterized in that~~ wherein the cells (2) of the morula (7) or the internal cell mass (4) of the blastocyst (1) has cells whose genome contains vectors that cause a lethal sensitivity to appropriate cultivation conditions in comparison to the particular wild type.

10. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 7,~~
~~characterized in that~~ wherein the genome of the donor cells (6) contains a vector which causes a resistance to additives of culture media.

11. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 7,~~
~~characterized in that~~ wherein the survivability of the cells (2) of the morula (7) or the internal cell mass (4) of the blastocyst (1) is reduced by adding suitable antibodies.

12. (currently amended)

The method according to Claim 9 ~~one of Claims 9 through 11,~~
~~characterized in that~~ wherein the survivability of the cells (2) of the morula (7) or the cells of the internal cell mass (4) of the blastocyst (1) is reduced in a way that is tailored to the varying degrees of differentiation of the donor cells (6) and is chronologically well-ordered.

13. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 12,~~
~~characterized in that~~ wherein before the donor cells (6) are supplied into the morula (7) or the blastocyst (1), the donor cells (6) are brought into contact in culture dishes with other blastocysts or internal cell masses isolated from other

blastocysts, and those donor cells having a relatively high contact affinity are isolated and supplied to the morula (7) and/or blastocyst (1) first cited.

14. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 12,~~
~~characterized in that wherein~~ before the donor cells (6) are supplied into the morula (7) or the blastocyst (1), the donor cells (6) are equipped with a genetic marker that ensures cells having a lower degree of differentiation are isolated and supplied into the morula (7) or blastocyst (1).

15. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 14,~~
~~characterized in that wherein~~ the morula (7) or blastocyst (1) is a mouse morula or mouse blastocyst.

16. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 14,~~
~~characterized in that wherein~~ the morula (7) or blastocyst (1) is a pig morula or pig blastocyst.

17. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 16,~~
~~characterized in that wherein~~ when the donor cells (6) are supplied to a blastocyst (1), the supply is performed through injection.

18. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 16,~~
~~characterized in that wherein~~ when the donor cells (6) are supplied to a morula (7), the supply is performed through

aggregation.

19. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 18,~~
~~characterized in that~~ wherein the donor cells (6) are human
donor cells.

20. CANCELED

21. CANCELED

22. CANCELED

23. (currently amended)

The method according to Claim 1 ~~one of Claims 1 through 18,~~
~~characterized in that~~ wherein the donor cells (6) are donor
cells of non-human mammals.

24. CANCELED

25. CANCELED

26. CANCELED